

## **TITLE 326 AIR POLLUTION CONTROL BOARD**

### **DEVELOPMENT OF RULES CONCERNING CONTROL OF VOLATILE ORGANIC COMPOUNDS FROM SINTER PLANTS**

#### **LSA DOCUMENT #97-359**

#### **SUMMARY/RESPONSE TO COMMENTS RECEIVED IN RESPONSE TO THE THIRD NOTICE OF COMMENT PERIOD**

IC 13-14-9-4.5 states that a board may not adopt a rule under IC 13-14-9 that is substantively different from the draft rule published under IC 13-14-9-4, until the board has conducted a third comment period that is at least twenty-one (21) days long.

Under IC 13-14-9-6 the Indiana Department of Environmental Management (IDEM) requested public comment on those portions of the proposed rule published on January 1, 1998 at 21 IR 1419 that are substantively different from the draft rule published on August 1, 1997 at 20 IR 3185. The comment period deadline was twenty-one (21) days in length and ended on January 21, 1998.

Comments were received from the following parties:

Bethlehem Steel Corporation	(BSC)
Inland Steel Company	(ISC)

Consistent with IC 13-14-9-4.5(c) and IC 13-14-9-6, the department has determined that the following comments address portions of the preliminarily adopted rule that are substantively different from the language contained in the draft rule published in the second notice of comment period.

#### **326 IAC 8-13-4 Compliance requirements**

##### **326 IAC 8-13-4(b)(1)(B) - reduction of mill scale oil and grease only for mill scale used in sintering operations**

*Comment:* The rule should clarify that the requirements for identifying a measure to reduce mill scale oil and grease content before its removal from the scale pits at the hot strip mills only applies to mill scale which will be used in a sintering process covered by the regulation.  
(BSC)

*Response:* Reducing mill scale oils and grease content is the key provision for controlling VOC emissions from sinter plants in Indiana. The department agrees that this provision should not apply to the mill scale that will not be used at the sinter plant and has clarified the rule language.

326 IAC 8-13-4(d)(4)(E)

*Comment:* The rule should adjust the oil and grease operating parameter upward to reflect the difference between the VOC emissions observed during testing and the VOC emission limits. (BSC)

*Response:* The department agrees that sometimes in a compliance test the operating parameter calculated as provided in the rule may correspond to a lower VOC emission rate than the VOC emission limit. For example, in a compliance test the operating parameter (average plus one standard deviation) may correspond to a VOC emission rate equal to 0.15 pounds of VOC per ton of sinter produced, as compare the VOC emission limits equal to 0.25 and 0.36. Continuous operating at that operating parameter will restrict a source's operations to unintended levels. It is recommended therefore, that using appropriate procedures, the source should be allowed to adjust the operating parameter to correspond to the VOC emission limits.

326 IAC 8-13-4(g) and 326 IAC 8-13-6(c) - exceedance of an applicable operating parameter is prima facie evidence of violation of the applicable mass emission limit

*Comment:* The rule should only require compliance with the applicable operating parameter ninety-five percent (95%) of the time. (BSC)

*Response:* The rule requires that the operating parameter value be determined in a test in which VOC emissions are determined and oil and grease data collected. The oil and grease and VOC data are expected to follow a normal distribution (bell shaped curve). The operating parameter value is based on the average plus one standard deviation; this value is expected to include sixty-eight percent (68%) of the observations. Under similar operating conditions sixteen percent (16%) of the oil content values are expected to exceed this value. However, the probability of those values occurring is comparatively much smaller. The commenter recommends that the operating parameter should be the average plus two standard deviations; this is expected to cover ninety-five percent (95%) of the observations.

For economic reasons, the rule requires that a limited number of samples of sinter burden be analyzed, averaged and compared with the operating parameter to verify compliance (for example, one sample per shift). The limited number of analyses may indicated results that are not representative of compliance test sinter burden characteristics; an operating parameter value based on two standard deviations may on a normal operating day allow the sinter burden oil content to reach extremely high values that may result in VOC emissions well above the VOC emission limits. It should be noted that unless continuous emission monitor systems (CEMS) are used to measure VOC emissions, compliance with the VOC emission limits can be verified only by stack tests which are fairly costly to perform. Therefore, the department does not agree that the operating parameter should be based on two standard deviations and that the compliance with the operating parameter should be allowed only ninety-five percent (95%) of the time.

However, to allow for the probability that on a normal operating day the sinter burden oil characteristics may be similar to that in the compliance test and that only a very limited number of samples may be outside the one standard deviation range, the department recommends that a

limited number of exceedances of the operating parameter be allowed. The department recommends that unless a source samples four (4) samples per shift which is expected to reduce uncertainty, the average oil content values on five non-consecutive days in a calendar month may exceed the operating parameter by a value equivalent to 0.01 lb VOC per ton of sinter produced. This value is sufficient to increase VOC emissions from the 0.25 lb VOC/ton limit to 0.26 lb VOC/ton.